STATE OF TENNESSEE
AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243

Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: May 28, 2015

Permit Number:
970086P

Date Expires: May 28, 2016

Issued To:	Installation Address:
Tennessee Department of Safety and Homeland Security Whiteville Radio Site	563 Main Street West Whiteville

Installation Description:	Emission Source Reference No.
One (1) Internal Combustion Propane/ Fuel-Fired Emergency Engine (79 hp) for a Generator	35-0106-01 NSPS (subpart JJJJ) NESHAP(subpart ZZZZ)

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated March 26, 2015 and is signed by Stephen Philyaw, Radio Systems Analyst for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

Barry R. Stephens
TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. New (manufactured after January 1, 2009) stationary spark ignition (SI) internal combustion engines (ICE) are subject to regulations under 40 CFR Part 60, Subpart JJJJ, **STANDARDS OF PERFORMANCE FOR STATIONARY SPARK IGNITION INTERNAL COMBUSTION ENGINES** including any and/or all applicable emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 3 – 16** that follow. The permittee's emergency use engine identified below shall achieve compliance with **Conditions 3 – 16** upon start-up.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
GM 5.0L, Cummins 50GGPC	2015	79

3. Particulate matter (PM) emitted by this source shall not exceed 0.6 lb/MMBtu (0.41 lb/hr). TAPCR 1200-03-06-.02(2)

4. Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-03-05-.01(1) and TAPCR 1200-03-05-.03(6)

5. The permittee must use Propane fuel for this generator engine. TAPCR 1200-03-09-.01(1)(d) and information from the application dated March 26, 2015.

6. Hydrocarbons plus nitrogen oxides ($HC+NO_x$) emitted by this source shall not exceed 13.4 grams per kW-hour. Compliance with this limit shall be indicated by compliance with **Condition 9**. 40 CFR §60.4233(c)

7. Carbon monoxide (CO) emitted by this source shall not exceed 519 grams per kW-hour. Compliance with this limit shall be indicated by compliance with **Condition 9**. 40 CFR §60.4233(c)

8. Pursuant to 40 CFR §60.4234, the permittee must operate and maintain the emergency stationary SI ICE to achieve the emission standards as required in **Conditions 6 and 7** over the entire life of the engine.

9. Pursuant to 40 CFR §60.4243(a), the permittee must comply by purchasing an engine certified to the emission standards in 40 CFR § 60.4231(c) (**Conditions 6 and 7**) for the same engine class and maximum engine power.

10. Pursuant to 40 CFR §60.4243(a)(1), if the permittee operates and maintains the certified stationary SI ICE and control device (if present) according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI ICE will not be considered out of compliance.

11. Pursuant to 40 CFR §60.4243(a)(2)(i), if the permittee does not operate and maintain the stationary SI ICE and control device (if present) according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the permittee must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required.

12. Pursuant to 40 CFR §60.4243(d), in order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in **Conditions 14-16**, is prohibited. If the permittee does not operate the engine according to the requirements in **Conditions 14-16**, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

13. Pursuant to 40 CFR §60.4243(d)(1), there is no time limit on the use of emergency stationary ICE in emergency situations.

14. Pursuant to 40 CFR §60.4243(d)(2), the permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (a) through (c) of this condition for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **Condition 15** count as part of the 100 hours per calendar year allowed by this condition.

    (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

    (b) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

    (c) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

15. Pursuant to 40 CFR §60.4243(d)(3), emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in **Condition 14**. Except as provided in paragraph (a) of this condition, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

    (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

        (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

        (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

        (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

        (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.

        (v) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

16. Pursuant to 40 CFR §60.4237(c), the permittee must install a non-resettable hour meter if the emergency stationary SI internal combustion engine does not meet the standards applicable to non-emergency engines..

17. The permittee shall keep a log of the number of operating hours for each calendar year, in a form that readily demonstrates compliance with **Conditions 14-16** (see example below). All data, including all required calculations, must be entered in the log no later than thirty (30) days from the end of the calendar quarter for which the data is required. The permittee shall retain these records for a period of not less than two (2) years and keep these records available for inspection by the Technical Secretary or their representative.

Year:				
	Operating Hours per Calendar Year			**Comments****
Calendar quarter	**Maintenance checks & readiness testing**	**Other non-emergency operation**	**Emergency operation**	
Jan - Mar				
Apr - June				
July - Sept				
Oct - Dec				
Totals				
** The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.				

TAPCR 1200-03-10-.02(2)(a)

18. The emergency engine is subject to regulation under 40 CFR Part 63, Subpart ZZZZ, **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES.** Pursuant to 40 CFR 63.6590(c), the permittee shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ, by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. No further requirements apply for the emergency engine under 40 CFR Part 63, Subpart ZZZZ. TAPCR 1200-03-09-.03(8) and 40 CFR 63 Subpart ZZZZ

19. The stated design power output capacity for the internal combustion engine is 79 horsepower (hp). Any increase in this capacity will require a construction permit. TAPCR 1200-03-09-.01(1)(d) and the application dated March 26, 2015

20. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09-.03(8)

21. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application. TAPCR 1200-03-09-.01(1)(d)

22. This permit is valid only at this location. TAPCR 1200-03-09-.03(6)

23. This permit shall serve as an operating permit until receipt of a standard operating permit (regardless of the expiration date), provided the operating permit is applied for within the time period specified in **Condition 24** of this permit and provided the conditions of this permit and any applicable emission standards are met.
TAPCR 1200-03-09-.02(2)

24. The permittee shall apply for an operating permit within thirty (30) days of start-up of the air contaminant source. TAPCR 1200-03-09-.02(3)(b)1.

25. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT,

with the information required in A) of this condition completed, to the Technical Secretary's representatives listed below:

A) DATE OF START-UP: _____ / ____ / _____
month day year

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of electrical power.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the West Tennessee Permit Program at the address listed below, no later than thirty (30) days after the air contaminant source is started up.

Department of Environment and Conservation
Division of Air Pollution Control
William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue, 15th Floor
Nashville, TN 37243
Air.Pollution.Control@tn.gov

(end of conditions)

The permit application gives the location of this source as 35°19'16.3" N Latitude and 89°9'32.2" W Longitude